Application No.: 10/590,574   Docket No.: 06005/41117

LISTING OF CLAIMS

1.   (Currently Amended) A ~~display entity~~ graphical support layer system to support graphic display and data structure needs of functional areas of a process plan by ~~for use in~~ presenting a visual depiction of a plurality of physical or logical process ~~entity~~ elements associated with [[a]] the process plant to a user via a display device, the ~~display entity~~ graphical support layer system comprising:

a computer readable memory; and

a plurality of display ~~object~~ objects corresponding to ~~associated with~~ the process ~~entity~~ elements, stored on the computer readable memory, and executable by a processor, [[the]] each display object including:

a value of a property any number of properties or parameters associated with the process ~~entity~~ element; and

a multiplicity of graphic visualizations of the process ~~entity~~ element, wherein one of the multiplicity of graphic visualizations is displayed on [[a]] the display device as a graphic representation of the process ~~entity~~ element when the display object is executed by a processor;

a graphic display stored on the computer readable memory, the graphic display corresponding to a depiction of an interaction of the plurality of process elements and adapted to be executed on a processor, the graphic display including:

references or copies of the plurality of display objects; and

indications of which of the graphic visualizations to display on the display device during execution of the graphic display;

wherein the system enables display of selected graphic visualizations of the plurality of display objects when displaying the graphic display;

the graphic visualizations enabling the same display object to be used in displays designed for different types of display devices or in displays designed using different graphical styles.

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2.   (Currently Amended) The system ~~display entity~~ of claim 1, wherein the identity of the one of the multiplicity of graphical visualizations that is to be displayed on the display device when the display object is executed is selectable.

3.   (Currently Amended) The system ~~display entity~~ of claim 1, wherein the display object further includes an indication defining one of the multiplicity of graphic visualizations as a default graphic visualization.

4.   (Currently Amended) The system ~~display entity~~ of claim 1, wherein a first one of the multiplicity of graphic visualizations depicts the process ~~entity~~ element according to a first graphical standard or norm and a second one of the multiplicity of graphic visualizations depicts the process ~~entity~~ element according to a second graphical standard or norm.

5.   (Currently Amended) The system ~~display entity~~ of claim 4, wherein the first graphical standard or norm is associated with an oil and gas industry graphical standard or norm or with a pharmaceutical industry graphical standard or norm.

6.   (Currently Amended) The system ~~display entity~~ of claim 1, wherein a first one of the multiplicity of graphic visualizations depicts the process ~~entity~~ element according to a first graphical style and a second one of the multiplicity of graphic visualizations depicts the process ~~entity~~ element according to a second graphical style.

7.   (Currently Amended) The system ~~display entity~~ of claim 1, wherein a first one of the multiplicity of graphic visualizations depicts the process ~~entity~~ element in a manner designed for display on a first type of display device and a second one of the multiplicity of graphic visualizations depicts the process ~~entity~~ element in a manner designed for display on a second type of display device.

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8.   (Currently Amended) The system display entity of claim 7, wherein the first type of display device is a standard computer screen and the second type of display device is a handheld display device associated with a personal data assistant or a wireless telephone.

9.   (Currently Amended) The system display entity of claim 7, wherein the first type of display device includes a display screen that is significantly different in size than the second type of display device.

10.   (Currently Amended) The system display entity of claim 1, wherein a first one of the multiplicity of graphic visualizations depicts the process entity element in a manner associated with a first function within the process plant and a second one of the multiplicity of graphic visualizations depicts the process entity element in a manner associated with a second function within the process plant.

11.   (Currently Amended) The system display entity of claim 1, wherein the display object is executable to accept and store different ones of the multiplicity of graphic visualizations at different times.

12.   (Currently Amended) The system display entity of claim 1, wherein the display object is executable to change graphic visualizations to use in [[a]] the graphic display after the display object associated with the graphic display.

13.   (Currently Amended) The system display entity of claim 1, wherein the display object is executable to store different ones of the multiplicity of graphic visualizations created by different designers, so that a second one of the multiplicity of graphic visualizations may be created by a different person than a first one of the multiplicity of graphic visualizations.

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14.   (Currently Amended) The system display entity of claim 1, wherein the display object further includes a routine that executes when the display object is executed to perform an operation with respect to [[the]] a value of the at least one property stored in [[the]] a property memory.

15.   (Currently Amended) The system display entity of claim 1, wherein the display object further includes an animation routine that animates one of the multiplicity of graphic visualizations based on [[the]] a value of the at least one property.

16.   (Currently Amended) The system display entity of claim 15, wherein the animation routine animates the one of the multiplicity of graphic visualizations by applying at least one of a skew, a rotation, a translation, a resizing, or a color change to the one of the multiplicity of graphic visualizations.

17.   (Currently Amended) The system display entity of claim 15, wherein one of the multiplicity of graphic visualizations enables a user to interact with the one of the multiplicity of graphic visualizations to perform a function.

18.   (Currently Amended) The system display entity of claim 17, wherein the function includes specifying a change to a value within a runtime environment.

19.   (Currently Amended) The display entity of claim 18, wherein the runtime environment includes a control routine.

20.   (Original) The system display entity of claim 15, wherein the executable routine detects a condition associated with the process entity element and indicates the detected condition via the one of the multiplicity of graphic visualizations.

21.   (Currently Amended) The system display entity of claim 20, wherein the executable routine detects a state associated with the process entity element and indicates the state via the one of the multiplicity of graphic visualizations.

22-37. (Canceled)

38.   (Currently Amended) A graphic display for use in a process plant that executes in a process plant to display information about the current state of devices within the process plant and represents to represent the interconnections between one or more a plurality of physical or logical entities process elements within the process plant, the graphic display comprising:

a plurality of graphical objects interconnected together, wherein each of the graphical objects is associated with and includes a visual representation multiple visualizations of a physical or a logical corresponding one of the plurality of process entity to be displayed elements on a display screen during execution of the graphic display; and

values for properties associated with the plurality of process elements a value for a property associated with at least one of the physical or logical process entities;

wherein at least one each of the plurality of graphical objects includes two or more visual representations multiple visualizations of a physical or a logic process entity corresponding one of the plurality of process elements and an indication of which of the two or more visual representations multiple visualizations to display on a display screen during execution of the graphic display;

the graphic visualizations enabling the same display object to be used in displays designed for different types of display devices or in displays designed using different graphical styles.

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39.   (Currently Amended) The graphic display of claim 38, wherein the value for a <u>one of the properties</u> ~~property~~ is bound to data source of a runtime environment within the process plant to receive data associated with the ~~property~~ <u>one of the properties</u> during the execution of the graphic display.

40.   (Currently Amended) The graphic display of claim 38, further including a routine that changes at least one of the ~~two or more visual representations~~ <u>multiple visualizations</u> of the one of the plurality of graphic objects during execution of the graphic display.

41.   (Currently Amended) The graphic display of claim 40, wherein the routine comprises an animation routine that animates the one of the ~~two or more visual representations~~ <u>multiple visualizations</u> ~~of the one of the plurality of graphic objects~~ during execution of the graphic display.

42.   (Currently Amended) The graphic display of claim 38, wherein the indication of which of the ~~two or more visual representations~~ <u>multiple visualizations</u> to display is user changeable.

43.   (Currently Amended) The graphic display of claim 38, wherein a first one of the ~~two or more visual representations~~ <u>multiple visualizations</u> of the one of the plurality of graphic objects depicts the process ~~entity~~ <u>element</u> according to a first graphical standard or norm and a second one of the ~~two or more visual representations~~ <u>multiple visualizations</u> ~~of the one of the plurality of graphic objects~~ depicts the process ~~entity~~ <u>element</u> according to a second graphical standard or norm.

44.   (Currently Amended) The graphic display of claim 38, wherein a first one of the ~~two or more visual representations~~ multiple visualizations of the one of the plurality of graphic objects depicts the process ~~entity~~ element in a manner suited to be displayed on a first type of display device and a second one of the ~~two or more visual representations~~ multiple visualizations ~~of the one of the plurality of graphic objects~~ depicts the process ~~entity~~ element in a manner suited to be displayed on a second type of display device.

45.   (Original) The graphic display of claim 44, wherein the first type of display device includes a display screen that is significantly different in size than the second type of display device.

46.   (Currently Amended) The graphic display of claim 38, wherein the display object is executable to accept different ones of the ~~two or more visual representations~~ multiple visualizations at different times.

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47.   (Withdrawn) A graphical display configuration system for use in creating a display representing the interconnections between one or more physical or logical process entities within a process plant, the system comprising:

a computer-readable storage medium having stored thereon one or more sets of instructions executable by a processor, the one or more sets of instructions comprising:

a library of one or more graphic objects, each graphic object associated with a process entity, executable to store a value of a property associated with the process entity, and including one or more graphic visualizations of the process entity, wherein one of the graphic objects includes a multiplicity of different graphic visualizations of the process entity, and one of the one or more graphic visualizations is selectable to be displayed on a display device as a graphic representation of the process entity when the graphic object is executed by the processor; and

a display editor module executable to create an executable graphic display object that represents an operation of the one or more process entities, the display editor comprising a graphically-based editor canvas routine that enables a user to define the executable graphic display object by placing indications of one or more graphic objects from the library of graphic objects onto an edit canvas to define a manner in which graphic visualizations of the one or more graphic objects will be displayed on the display device during execution of the graphic display object, wherein the graphically based editor canvas routine enables the user to select, when the one of the graphic objects is placed into the edit canvas, between the multiplicity of different graphic visualizations to be displayed upon execution of the one of the graphic objects.

48.   (Withdrawn) The graphical display configuration system of claim 47, wherein the identity of the one of the multiplicity of graphical visualizations that is to be displayed on the display device when the graphic object is executed is selectable.

49.　(Withdrawn)　The graphical display configuration system of claim 47, wherein a first one of the multiplicity of different graphic visualizations depicts the process entity according to a first graphical standard or norm and a second one of the multiplicity of different graphic visualizations depicts the process entity according to a second graphical standard or norm.

50.　(Withdrawn)　The graphical display configuration system of claim 47, wherein a first one of the multiplicity of different graphic visualizations depicts the process entity according to a first graphical style and a second one of the multiplicity of different graphic visualizations depicts the process entity according to a second graphical style.

51.　(Withdrawn)　The graphical display configuration system of claim 47, wherein a first one of the multiplicity of different graphic visualizations depicts the process entity in a manner designed for display on a first type of display device and a second one of the multiplicity of different graphic visualizations depicts the process entity in a manner designed for display on a second type of display device.

52.　(Withdrawn)　The graphical display configuration system of claim 47, wherein a first one of the multiplicity of different graphic visualizations depicts the process entity in a manner associated with a first function within the process plant and a second one of the multiplicity of different graphic visualizations depicts the process entity in a manner associated with a second function within the process plant.

53.　(Withdrawn)　The graphical display configuration system of claim 47, wherein the graphic object is executable to accept and store different ones of the multiplicity of different graphic visualizations at different times.

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54.   (Withdrawn) The graphical display configuration system of claim 47, wherein the graphic object further includes an animation routine that animates one of the multiplicity of different graphic visualizations based on the value of the property.

55.   (Withdrawn) The graphical display configuration system of claim 47, further including a property definition canvas routine executable to enable a user to define the property associated with the one of the one or more graphic objects and a binding definition routine executable to enable a user to specify a binding between the property and a runtime environment within the process plant.

56.   (Withdrawn) The graphical display configuration system of claim 55, further including a script definition routine executable to enable a user to define an executable routine that operates on the property.

57.   (Withdrawn) The graphical display configuration system of claim 56, wherein the script definition routine operates in conjunction with an animation routine that animates the selected one of the multiplicity of different graphic visualizations of the one of the graphic objects.

58.   (Withdrawn) The graphical display configuration system of claim 57, wherein the script definition routine enables a user to define the executable routine as a routine that detects a condition associated with the process entity and that indicates the detected condition with a change to the selected one of the multiplicity of different graphic visualizations of the one of the graphic objects.